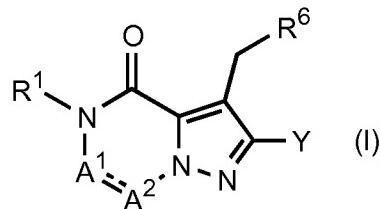


AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (original): A compound represented by the formula (I):



wherein R¹ is a hydrogen atom, an optionally substituted alkyl group, an optionally substituted cycloalkyl group, an optionally substituted aryl group, or an optionally substituted heteroaryl group;

the solid line and dotted line between A¹ and A² indicate a double bond (A¹=A²) or a single bond (A¹-A²);

A¹ is a nitrogen atom or a group represented by the formula C(R²) and A² is a group represented by the formula C(R⁴), in the case of the solid line and dotted line between A¹ and A² being a double bond (A¹=A²);

A¹ is a group represented by the formula C(R²)(R³) and A² is a group represented by the formula C(R⁴)(R⁵), in the case of the solid line and dotted line between A¹ and A² being a single bond (A¹-A²);

R¹ and R² may be taken together with the adjacent nitrogen atom and carbon atom to form an optionally substituted 4- to 7-membered ring in the case of the solid line and dotted line between A¹ and A² being a double bond (A¹=A²) and A¹ being a group represented by the

formula C(R²);

R² is a hydrogen atom, a halogen atom, a cyano group, a formyl group, an optionally substituted alkyl group, an optionally substituted cycloalkyl group, an optionally substituted cycloalkyloxy group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, an optionally substituted amino group, an optionally substituted carbamoyl group, a carboxyl group, an optionally substituted alkoxy group, an optionally substituted alkoxycarbonyl group, an optionally substituted cycloalkyloxycarbonyl group, a tetrahydrofuranyloxycarbonyl group, an optionally substituted aryl group, an optionally substituted aryloxy group, an optionally substituted aryloxycarbonyl group, an optionally substituted aralkyl group, an optionally substituted aralkyloxy group, an optionally substituted aroyl group, an optionally substituted arylthio group, an optionally substituted arylsulfinyl group, an optionally substituted arylsulfonyl group, an optionally substituted alkylthio group, an optionally substituted alkylsulfinyl group, an optionally substituted alkylsulfonyl group, an optionally substituted heteroaryl group, an optionally substituted heteroarylalkyl group, an optionally substituted heteroarylcyclon group, an optionally substituted heteroaryloxy group, an optionally substituted alkylcarbonyl group, an optionally substituted cycloalkylcarbonyl group, or an optionally substituted nitrogen-containing saturated heterocyclic group;

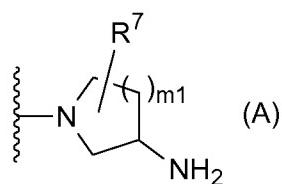
R³ is a hydrogen atom, a halogen atom, a cyano group, an optionally substituted alkyl group, an optionally substituted cycloalkyl group, an optionally substituted carbamoyl group, a carboxyl group, an optionally substituted alkoxy group, an optionally substituted alkoxycarbonyl group, an optionally substituted aryl group, an optionally substituted aryloxy group, an optionally substituted arylthio group, an optionally substituted arylsulfinyl group, an optionally substituted arylsulfonyl group, an optionally substituted alkylthio group, an optionally substituted alkylsulfinyl group, an optionally substituted alkylsulfonyl group, an optionally substituted heteroaryl group, an optionally substituted heteroarylalkyl group, an optionally substituted heteroarylcyclon group, an optionally substituted heteroaryloxy group, an optionally substituted alkylcarbonyl group, an optionally substituted cycloalkylcarbonyl group, or an optionally substituted nitrogen-containing saturated heterocyclic group;

arylsulfonyl group, an optionally substituted heteroaryl group, an optionally substituted heteroarylalkyl group, an optionally substituted heteroarylcarbonyl group, an optionally substituted heteroaryloxy group, or an optionally substituted alkylcarbonyl group;

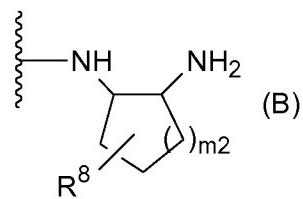
R^4 and R^5 are independently a hydrogen atom, a halogen atom, a cyano group, an optionally substituted alkyl group, an optionally substituted cycloalkyl group, an optionally substituted carbamoyl group, a carboxyl group, an optionally substituted alkoxy group, an optionally substituted cycloalkyloxy group, an optionally substituted alkoxycarbonyl group, an optionally substituted amino group, an optionally substituted aryl group, an optionally substituted aryloxycarbonyl group, an optionally substituted aralkyl group, an optionally substituted aroyl group, an optionally substituted aryloxy group, an optionally substituted arylthio group, an optionally substituted arylsulfonyl group, an optionally substituted heteroaryl group, an optionally substituted heteroarylalkyl group, an optionally substituted heteroarylcarbonyl group, or an optionally substituted alkylcarbonyl group;

R^6 is a hydrogen atom, an optionally substituted alkyl group, an optionally substituted cycloalkyl group, an optionally substituted aryl group, an optionally substituted vinyl group, an optionally substituted ethynyl group, an optionally substituted nitrogen-containing saturated heterocyclic group, or an optionally substituted heteroaryl group; and

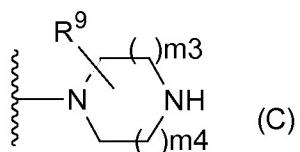
$-Y$ is any of groups represented by the formula (A), formula (B), formula (C) and formula (D) shown below:



wherein m1 is 0, 1, 2 or 3, and R⁷ is absent or one or two R⁷'s are present and are independently a halogen atom, a hydroxyl group, an oxo group, an optionally substituted alkoxy group, an optionally substituted alkyl group, an optionally substituted aryl group, an optionally substituted aralkyl group, an optionally substituted amino group, a carboxyl group, an optionally substituted alkoxy carbonyl group or an optionally substituted carbamoyl group, or two R⁷'s, when taken together, represent methylene or ethylene and may bind to one or more carbon atoms constituting the ring, to form a new ring;

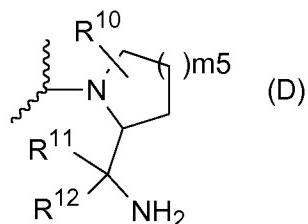


wherein m2 is 0, 1, 2 or 3, and R⁸ is absent or one or two R⁸'s are present and are independently a halogen atom, a hydroxyl group, an oxo group, an optionally substituted alkoxy group, an optionally substituted alkyl group, an optionally substituted aryl group, an optionally substituted aralkyl group, an optionally substituted amino group, a carboxyl group, an optionally substituted alkoxy carbonyl group or an optionally substituted carbamoyl group, or two R⁸'s, when taken together, represent methylene or ethylene and may bind to one or more carbon atoms constituting the ring, to form a new ring;



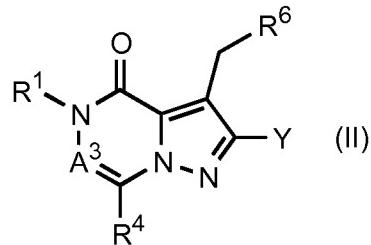
wherein m3 and m4 are independently 0 or 1, and R⁹ is absent or one or two R⁹'s are present and

are independently a halogen atom, a hydroxyl group, an oxo group, an optionally substituted alkoxy group, an optionally substituted alkyl group, an optionally substituted aryl group, an optionally substituted aralkyl group, an optionally substituted amino group, a carboxyl group, an optionally substituted alkoxy carbonyl group or an optionally substituted carbamoyl group, or two R⁹'s, when taken together, represent methylene or ethylene and may bind to one or more carbon atoms constituting the ring, to form a new ring; and



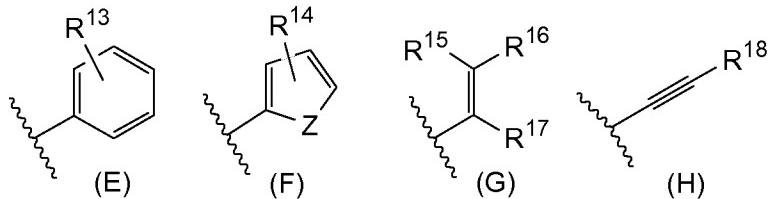
wherein m5 is 1, 2 or 3, R¹⁰ is absent or one or two R¹⁰'s are present and are independently a halogen atom, a hydroxyl group, an oxo group, an optionally substituted alkoxy group, an optionally substituted alkyl group, an optionally substituted aryl group, an optionally substituted aralkyl group, an optionally substituted amino group, a carboxyl group, an optionally substituted alkoxy carbonyl group or an optionally substituted carbamoyl group, or two R¹⁰'s, when taken together, represent methylene or ethylene and may bind to one or more carbon atoms constituting the ring, to form a new ring, and R¹¹ and R¹² are independently a hydrogen atom, methyl, ethyl, propyl or isopropyl, or R¹¹ and R¹², when taken together with the adjacent carbon atom, represent cyclopropyl, cyclobutyl or cyclopentyl,
a prodrug of said compound, or a pharmaceutically acceptable salt of said compound or prodrug.

2. (original): A compound according to claim 1, which is represented by the formula (II):



wherein A³ is a nitrogen atom or a group represented by the formula C(R²), and R¹, R², R⁴, R⁶ and Y are as defined in claim 1, a prodrug thereof or a pharmaceutically acceptable salt of the compound or prodrug.

3. (original): A compound, a prodrug thereof or a pharmaceutically acceptable salt of the compound or prodrug according to either of claims 1 and 2, wherein R⁶ is the following formula (E), formula (F), formula (G) or formula (H):



wherein Z is an oxygen atom, the formula S(O)p or N(R¹⁹);

R¹³ is absent or one or two R¹³'s are present and are independently a halogen atom, a hydroxyl group, a formyl group, a carboxyl group, a cyano group, an alkylthio group, an alkylsulfinyl group, an alkylsulfonyl group, an alkyl group, a haloalkyl group, a cycloalkyl group, an alkoxy group, a haloalkoxy group, an optionally substituted amino group, an optionally substituted carbamoyl group, an alkoxy carbonyl group, an optionally substituted alkylcarbonyl group, a cycloalkylcarbonyl group, an optionally substituted phenyl group, an optionally

substituted heteroaryl group or a nitrogen-containing saturated heterocyclic group, or two R¹³s, when taken together, represent a C₁₋₃ alkylatedioxy group;

R¹⁴ is absent or one or two R¹⁴'s are present and are independently a halogen atom, a cyano group, an alkyl group, a haloalkyl group, a cycloalkyl group, an alkoxy group or a haloalkoxy group;

R¹⁵ is methyl, ethyl, a chlorine atom or a bromine atom;

R¹⁶ is a hydrogen atom, methyl, ethyl, a chlorine atom or a bromine atom;

R¹⁷ is a hydrogen atom, methyl or ethyl;

R¹⁸ is a hydrogen atom, methyl, ethyl, cyclopropyl or cyclobutyl;

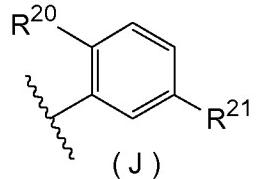
p is 0, 1 or 2; and

R¹⁹ is a hydrogen atom or an alkyl group.

4. (original): A compound, a prodrug thereof or a pharmaceutically acceptable salt of the compound or prodrug according to claim 3, wherein R⁶ is the formula (E) or the formula (H).

5. (original): A compound, a prodrug thereof or a pharmaceutically acceptable salt of the compound or prodrug according to claim 4, wherein R⁶ is the formula (E) and one or two R¹³ are present and are independently a halogen atom, a cyano group, an alkylthio group, an alkylsulfonyl group, a C₁₋₃ alkylatedioxy group, an alkyl group, a haloalkyl group, a cycloalkyl group, an alkoxy group or a haloalkoxy group.

6. (original): A compound, a prodrug thereof or a pharmaceutically acceptable salt of the compound or prodrug according to either of claims 1 and 2, wherein R⁶ is the following formula (J):



wherein R²⁰ is a halogen atom, a cyano group, an alkylthio group, an alkylsulfonyl group, an alkyl group, a haloalkyl group, a cycloalkyl group, an alkoxy group or a haloalkoxy group, and R²¹ is a hydrogen atom or a fluorine atom.

7. (currently amended): A compound, a prodrug thereof or a pharmaceutically acceptable salt of the compound or prodrug according to ~~any one of claims 1 to 6~~claim 1, wherein Y is the formula (A) or (B).

8. (currently amended): A compound, a prodrug thereof or a pharmaceutically acceptable salt of the compound or prodrug according to ~~any one of claims 1 to 6~~claim 1, wherein Y is the formula (A).

9. (currently amended): A compound, a prodrug thereof or a pharmaceutically acceptable salt of the compound or prodrug according to ~~any one of claims 1 to 8~~claim 1, wherein R² is a hydrogen atom, a cyano group, an optionally substituted alkyl group, an optionally substituted cycloalkyl group, an optionally substituted alkenyl group, an optionally substituted carbamoyl group, a carboxyl group, an optionally substituted alkoxy carbonyl group, an optionally substituted cycloalkyloxycarbonyl group, a tetrahydrofuranyloxycarbonyl group, an optionally substituted aryl group, an optionally substituted aryloxycarbonyl group, an optionally substituted aralkyl group, an optionally substituted aroyl group, an optionally substituted heteroaryl group, an optionally substituted heteroarylalkyl group, an optionally substituted heteroarylcarbonyl group or an optionally substituted alkylcarbonyl group.

10. (currently amended): A compound, a prodrug thereof or a pharmaceutically acceptable salt of the compound or prodrug according to ~~any one of claims 1 to 8~~claim 1, wherein R² is a hydrogen atom, a cyano group, an optionally substituted alkyl group, an optionally substituted carbamoyl group, a carboxyl group, an optionally substituted alkoxy carbonyl group, an optionally substituted cycloalkyloxycarbonyl group, a tetrahydro-furanyloxycarbonyl group, an optionally substituted aryl group, an optionally substituted aryloxycarbonyl group, an optionally substituted aralkyl group, an optionally substituted aroyl group, an optionally substituted heteroaryl group or an optionally substituted alkylcarbonyl group.

11. (currently amended): A compound, a prodrug thereof or a pharmaceutically acceptable salt of the compound or prodrug according to ~~any one of claims 1 to 10~~claim 1, wherein R⁴ is a hydrogen atom, an optionally substituted alkyl group, a cyano group, an optionally substituted carbamoyl group, a carboxyl group, an optionally substituted alkoxy group, an optionally substituted cycloalkyloxy group, an optionally substituted alkoxy carbonyl group, an optionally substituted aryl group, an optionally substituted aryloxycarbonyl group, an optionally substituted aralkyl group, an optionally substituted aroyl group, an optionally substituted heteroaryl group, an optionally substituted heteroarylalkyl group, an optionally substituted heteroarylcarbonyl group or an optionally substituted alkylcarbonyl group.

12. (currently amended): A compound, a prodrug thereof or a pharmaceutically acceptable salt of the compound or prodrug according to ~~any one of claims 1 to 10~~claim 1, wherein R⁴ is a hydrogen atom or an optionally substituted alkyl group.

13. (currently amended): A compound, a prodrug thereof or a pharmaceutically acceptable salt of the compound or prodrug according to ~~any one of claims 1 to 10~~claim 1,

wherein R⁴ is the formula: –C(R²²)(R²³)–A⁴–R²⁴ in which R²² and R²³ are independently a hydrogen atom, methyl, ethyl, propyl, isopropyl, methoxy or ethoxy, or R²² and R²³, when taken together with the adjacent carbon atom, represent cyclopropyl, cyclobutyl or cyclopentyl; A⁴ is a single bond, methylene or ethylene; and R²⁴ is a hydrogen atom, a cyano group, an alkyl group, a haloalkyl group, a cycloalkyl group, a tetrahydrofuranyl group, an optionally substituted carbamoyl group, a carboxyl group, an optionally substituted alkoxy group, an optionally substituted aryloxy group, an optionally substituted alkoxycarbonyl group, an optionally substituted aryl group, an optionally substituted aryloxycarbonyl group, an optionally substituted aroyl group, an optionally substituted heteroarylcarbonyl group or an optionally substituted alkylcarbonyl group.

14. (currently amended): A compound, a prodrug thereof or a pharmaceutically acceptable salt of the compound or prodrug according to ~~any one of claims 1 to 13~~claim 1, wherein R¹ is a hydrogen atom, an optionally substituted alkyl group of 1 to 3 carbon atoms, or an optionally substituted aryl group, and the substituent(s) of the optionally substituted alkyl group is selected from fluorine atom, optionally substituted aroyl groups, carboxyl group, optionally substituted alkoxycarbonyl groups, optionally substituted aryl groups and optionally substituted aryloxy groups.

15. (currently amended): A compound, a prodrug thereof or a pharmaceutically acceptable salt of the compound or prodrug according to ~~any one of claims 1 to 13~~claim 1, wherein R¹ is a hydrogen atom, methyl or a group represented by the formula: –Ra–Rb–Rc in which

Ra is an alkylene chain;

Rb is a single bond or a carbonyl group; and

Rc is an optionally substituted alkyl group, an optionally substituted alkoxy group, an optionally substituted aryl group, an optionally substituted heteroaryl group, an optionally substituted heteroaryloxy group or an optionally substituted aryloxy group.

16. (currently amended): A pharmaceutical composition comprising a compound, a prodrug thereof or a pharmaceutically acceptable salt of the compound or prodrug according to ~~any one of claims 1 to 15~~claim 1 as an active ingredient.

17. (currently amended): A dipeptidyl peptidase IV inhibitor comprising a compound, a prodrug thereof or a pharmaceutically acceptable salt of the compound or prodrug according to ~~any one of claims 1 to 15~~claim 1 as an active ingredient.

18. (currently amended): A pharmaceutical composition for the treatment of diabetes comprising a compound, a prodrug thereof or a pharmaceutically acceptable salt of the compound or prodrug according to ~~any one of claims 1 to 15~~claim 1 as an active ingredient.

19. (currently amended): Use of a compound, a prodrug thereof or a pharmaceutically acceptable salt of the compound or prodrug according to ~~any one of claims 1 to 15~~claim 1 in the manufacture of a dipeptidyl peptidase IV inhibitor.

20. (currently amended): Use of a compound, a prodrug thereof or a pharmaceutically acceptable salt of the compound or prodrug according to ~~any one of claims 1 to 15~~claim 1 in the manufacture of a pharmaceutical composition for the treatment of diabetes.

21. (currently amended): A method for treating diabetes comprising administering an effective amount of a compound, a prodrug thereof or a pharmaceutically acceptable salt of the compound or prodrug according to ~~any one of claims 1 to 15~~claim 1 to a patient who needs treatment.